

AMENDMENTS TO THE CLAIMS

Please cancel claim 5 without disclaimer or prejudice, and amend claims as set forth below. A complete listing of all claims with their correct identifier is presented below.

1. (Currently amended) A short arc type high pressure discharge lamp comprising:
a pair of electrodes disposed inside the discharge lamp and facing each other,
a light emitting portion containing more than 0.15 mg/mm³ mercury, and
a sealing portions portion that extend extends to both sides a side of the light emitting portion, seal and seals part of electrodes respectively one of the electrodes, and a metallic foil that is sealed in the sealing portion,
wherein join the one of the electrodes and the metallic foils foil are joined in the sealing portion, and

wherein the metallic foil is formed in an approximately omega shape in a cross-sectional view thereof by press processing, and at least one welding trace where the metallic foil and the one of the electrodes are welded is located on a curved line of the approximately omega shape in a cross-section of the metallic foil.

2. (Original) The short arc type high pressure discharge lamp according to claim 1, wherein in a joint portion of at least one of the electrodes and one of the metallic foils, there are at least two welding traces welded are formed from a width direction of the one on the curved line of the approximately omega shape of metallic foils.

3. (Currently amended) A method of welding an electrode and a metallic foil, comprising steps of:

press processing forming a metallic foil having to form a curved surface portion by press processing, wherein so that a cross-sectional view of the metallic foil is in an approximately omega shape,

placing the electrode in the curved surface portion, and

welding from a width direction of the metallic foil and the electrode at a curved surface portion of the omega shape of the metallic foil.

4. (Original) A short arc type high pressure discharge lamp having an electrode assembly made by the method according to claim 3.

5. (Canceled)

6. (New) The short arc type high pressure discharge lamp according to claim 1, wherein the curved portion is formed over an entire length of the metallic foil.

7. (New) The light short arc type high pressure discharge lamp according to claim 1, wherein the light emitting portion contains more than 0.15 mg/mm³ mercury.

8. (New) The short arc type high pressure discharge lamp according to claim 2, wherein the two welding traces are formed from a width direction of the metallic foil.